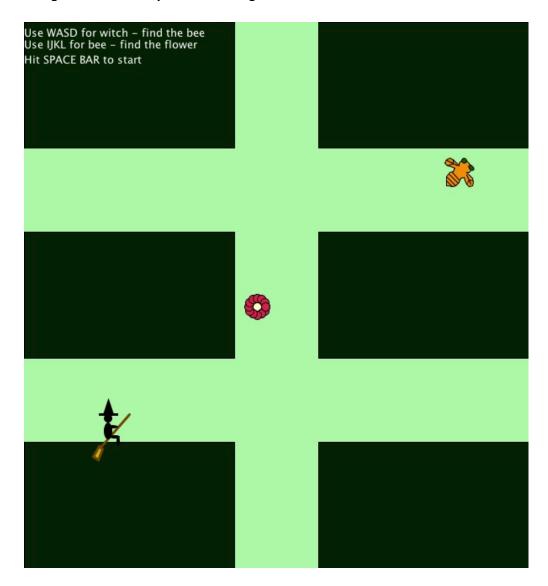
## Processing: Velocities and Positions in a game Peabody Charter 5<sup>th</sup> grade -- Z. Wood & K. Davis & J. Wilcox

Today we will add to a program that implements a chasing game. *Our goal is to practice using velocities and positions in a game.* 



In this game if the witch catches the bee, the bee starts dancing and witch is reset to her start position and earns a point). If the bee lands on the flower, the witch dances and bee is reset to its start and earns a point. If either character hits the wall, it resets the character to their start and that character loses a point. In this game, whichever character gets to 10 points wins!

## Task 1:

Student's must fill in the correct velocities in the **keyPressed** method:

1) to make the WASD keys work to move the witch – specifically 'a' should move the witch to the left, 'w' should move up )(forward), 'd' should move to the right, and 's' should move down (back)

2) to make the IJKL keys to move the bee – specifically: 'j' should move the bee to the left, 'i' should move up )(forward), 'l' should move to the right, and 'k' should move down (back)

## Task 2:

Student's must fill in the correct positions to reset the characters correctly when they go off screen in the **wrapAround** method. In general – the characters can travel along the paths and the paths should wrap around. For example if the witch travels off the left side of the screen, she should re-appear on the right (still moving left), likewise for the bee.

## **Optional Task 3:**

Change the appearance of the witch, bee or flower to personalize the game. For example, look for:

//function to draw the witch

//TODO - if you want - change the witch to be another creature - just keep the shape //centered around (0, 0) and about 40 pixels by 40 pixels